What is claimed is:

1. A method for specifying a device independent trap color in a color space for a color boundary, comprising:

obtaining a first color value (C1), representing a first color in a color space associated with the color boundary, having a first darkness and first chromaticity;

obtaining a second color value (C2), representing a second color in the color space associated with the color boundary, having a second darkness and second chromaticity; and

generating a trap color value, representing a color in the color space, having substantially a same darkness as a lighter of the first and second color value, and a chromaticity that is a function of the first and second chromaticities of the first and second color values.

2. The method of claim 1 wherein the first color value and the second color value have a first and second luminocity value, respectively, and wherein a luminocity value of the trap color is selected from one of the first and second luminocity values corresponding to a darker of the first and second color value.

3. The method of claim 1 wherein the first and second color values are associated with a device dependent state, the method further comprising

prior to generating a trap color value, transforming the first and the second color values from the device dependent space to a device independent space.

4. The method of claim 3 further comprising after generating the trap color value, transforming the trap color value from a device independent space to a device dependent space associated with an output device to be used to render the color boundary.

5. The method of claim 3 wherein the device independent color space is the CIELAB color space.

6. The method of claim 1 wherein the first color value is represented by a first luminosity (L1) and a first pair of chromaticity (A1 and B1) color values, the second color value is represented by a second luminosity (L2) and a second pair of chromaticity (A2 and B2) color values, and the trap color is represented by a third luminosity (L3) and a third pair of chromaticity (A3 and B3) color values and is generated in accordance with:

$$L3 = DARK(L1, L2),$$
$$A3 = (A2+A1)/2, \text{ and } B3 = (B2+B1)/2,$$

where DARK(L1, L2) returns that value corresponding to a darker of the first and second luminosity color values L1 and L2.

7. A method of specifying output device independent trapping color values in a graphical processing system, comprising:

obtaining a computer readable file including color objects;

identifying color boundaries between color objects, each color boundary having an edge and a first color value representing a first color in a color space, and a second color value representing a second color in the color space;

converting the first and second color values from the color space to a device independent color space;

identifying trap regions;

generating a trap color value, representing a color in the device independent color space, for each identified trap region; and

storing the generated trap color value in an output file.

8. The method of claim 7 further comprising transforming the trap color values from the device independent space to a device dependent space associated with an output device that is to render the color boundaries.

9. The method of claim 7 where the step of identifying trap regions includes identifying only those color boundaries whose difference between respective first and second color values is greater than a predefined threshold value.

10. The method of claim 9 where the difference between color values is computed by determining a rectilinear distance between the respective first and second color values.

11. The method of claim 9 where the step of generating a trap color value includes

computing a mean difference between the respective first and second color values.

12. The method of claim 9 where the step of generating a trap color value includes selecting the trap color value colorimetrically.

13. The method of claim 12 where each color value has a luminocity and a chromaticity value, and where the trap color luminocity value corresponds to the luminocity value associated with the darker of the first and second color values and where the trap color chromaticity value is a function of the first and second chromaticity values.

14. The method of claim 12 where the trap color value is selected by mapping a lighter of the respective first and second color values to a chromaticity but at darkness of a darker of the respective first and second color values.

15. The method of claim 14 where the chromaticity is an average chromaticity.

16. The method of claim 14 where the chromaticity is a function of chromaticities associated with the first and second color values.

17. The method of claim 14 wherein the trap color value is selected by mapping a lighter of the respective first and second color values to a chromaticity at a darkness of a darker of the respective first and second color values and at bisection of a line between them.

18. A method for specifying a device independent trap color in a color space for a color boundary, comprising:

obtaining a first color value (C1), representing a first color in a color space associated with the color boundary, having a first darkness and first chromaticity;

obtaining a second color value (C2), representing a second color in the color space associated with the color boundary, having a second darkness and second chromaticity; and

generating a trap color value, representing a color in the color space, including computing a mean difference between the respective first and second color values.

19. A program storage device readable by a computer system and having encoded therein a program of instructions that includes instructions to:

obtain a first color value (C1), representing a first color in a color space associated with the color boundary, having a first darkness and first chromaticity;

obtain a second color value (C2), representing a second color in the color space associated with the color boundary, having a second darkness and second chromaticity; and

generate a trap color value, representing a color in the color space, having substantially a same darkness as a lighter of the first and second color value, and a chromaticity that is a function of the first and second chromaticities of the first and second color values.

20. A program storage device readable by a computer system and having encoded therein a program of instructions that includes instructions to:

obtain a computer readable file including color objects;

identify color boundaries between color objects, each color boundary having an edge and a first color value representing a first color in a color space, and a second color value representing a second color in the color space;

convert edge color values to a device independent color space;

identify trap regions;

generate a trap color value, representing a color in the device independent color space, for each identified trap region; and

store the generated trap color value in an output file.

21. A program storage device readable by a computer system and having encoded therein a program of instructions that includes instructions to:

obtain a first color value (C1), representing a first color in a color space associated with the color boundary, having a first darkness and first chromaticity;

obtain a second color value (C2), representing a second color in the color space associated with the color boundary, having a second darkness and second chromaticity; and

generate a trap color value, representing a color in the color space, including compute a mean difference between the respective first and second color values.